UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 6
1201 ELM STREET, SUITE 500
DALLAS, TX 75270

OCT 02 2019

CERTIFIED MAIL 7007 3020 0000 1523 1373 RETURN RECEIPT REQUESTED

Mr. James Harrison
General Manager
Veolia Environmental Services
P.O. Box 2563
Port Arthur, TX 77643-2563

RE: Veolia ES Technical Solutions, LLC (Veolia) Port Arthur Facility
Final Petition Reissuance Approval Decision to add WDW-358

Dear Mr. Harrison:

The land disposal restrictions prohibit the injection of hazardous waste unless a petitioner can demonstrate to EPA, to a reasonable degree of certainty, that there will be no migration of hazardous constituents from the injection zone for as long as the wastes remain hazardous. The land disposal restrictions for injection wells codified in 40 CFR Part 148 provide the standards and procedures by which petitions to dispose of an otherwise prohibited waste by injection will be reviewed and by which exemptions pursuant to these petitions will be granted or denied. Part 148 also provides for the reissuance of an exemption if the reissuance complies with the above-mentioned standards.

A letter dated August 2, 2019, informed Veolia that EPA was proposing to approve its petition reissuance request for an exemption to the land disposal restrictions. The public comment period associated with this decision began on August 8, 2019, and closed on September 23, 2019, and no comments were received.

Based on a detailed technical review of the petition reissuance request and support documents, EPA has determined that this information for the Veolia site meets the requirements of 40 CFR Part 148 by demonstrating that, to a reasonable degree of certainty, there will be no migration of hazardous constituents from the injection zone for 10,000 years.

The following are conditions of this land disposal restrictions exemption.

Final Petition Reissuance Approval Conditions

This approval of a petition for reissuance of an exemption to allow the injection of restricted hazardous wastes is subject to the following conditions, which are necessary to assure that the standard in 40 CFR §148.20(a) is met. Noncompliance with any of these conditions is grounds for termination of the exemption in accordance with 40 CFR §148.24(a)(1). This exemption is applicable to the Veolia injection wells: WDW-160 and WDW-358, located at its Port Arthur, Texas facility.

1. Injection of restricted waste shall be limited to the following injection interval and zone:

Well	Injection Interval	Injection Zone Depth	Injection Interval Depth
WDW-160	6800-foot Interval	5146' - 7205'[1]	6805' - 6869'[1]
	7000-foot Interval	5146' - 7205'[1]	6996' - 7205'[1]
WDW-358	6800-foot Interval	5145' - 7292'[2]	6830' - 6900'[2]
	7000-foot Interval	5145' - 7292'[2]	7021' - 7240'[2]

([1]WDW-160 Injection Interval depths are referenced to Kelly Bushing (KB) depths on WDW-160's sidetrack's Dual Induction Focused Log Compensated Z-Densilog Compensated Neutron Log Gamma Ray Log dated 3/11/98 with a KB elevation of 21 feet above mean sea level and 15 feet above ground level)
([2]WDW-358 Injection Zone depths are referenced to Kelly Bushing (KB) depths on WDW-358's sidetrack's Baker Hughes High Definition Induction Log Compensated Z-Densilog Compensated Neutron Log Gamma Ray Log dated 1/27/19 with a KB elevation of 21 feet above ground level)

2. WDW-160 and WDW-358 can inject into only one injection interval at a time so that the cumulative injection volume into each interval can be monitored.

3. For WDW-160 and WDW-358, the cumulative monthly volume injected into the injection intervals shall not exceed that calculated as follows:

   6800-foot Interval: (181.5 gpm)(1440 minutes/day)(number of days in that month)
   7000-foot Interval: (200 gpm)(1440 minutes/day)(number of days in that month)

4. The facility shall cease injection into WDW-160 and WDW-358 by December 31, 2041

5. The characteristics of the injected waste stream shall for WDW-160 and WDW-358 at all times conform to those discussed in Sections 3.5.1 through 3.5.3 of the 2017 Petition Reissuance document for WDW-160. The density of the waste stream injected into each interval shall remain within the range of 0.999 g/cm^3 to 1.078 g/cm^3 measured at 60^{0}F and 1 atmosphere and equivalent to a specific gravity range of 1.000 to 1.079 measured at 60^{0}F and 1 atmosphere and referenced to 60^{0}F.

6. The approval for injection is limited to the following hazardous wastes:

   D001-D043

   F001-F012, F019-F028, F032, F034, F035, F037- F039 (for constituents listed in Table 3.5.1-I)

   K001-K011, K013-K052, K060-K062, K069, K071, K073, K083-K088, K093-K118, K123-K126, K131, K132, K136, K141-K145, K147-K151, K156-K159, K161, K169-K172, K174-K178, K181

P001-P018, P020-P024, P026-P031, P033, P034, P036-P051, P054, P056-P060, P062-P078, P081, P082, P084, P085, P087-P089, P092, P093-P099, P101-P106, P108, P109-P116, P118-P123, P127, P128, P185, P188-P192, P194, P196-P199, P201-P205

U001-U012, U014-U039, U041-U053, U055-U064, U066-U099, U101-U103, U105-U138, U140-U174, U176-U194, U196, U197, U200, U201, U203-U211, U213-U223, U225- U228, U234-U240, U243, U244, U246-U249, U271, U278-U280, U328, U353, U359, U364, U367, U372, U373, U387, U389, U394, U395, U404, U409, U410, and U411.

7. The facility must petition for approval to inject additional hazardous wastes which are not included in Condition No. 6, above. The facility must also petition for approval to increase the concentration of any waste which would necessitate the recalculation of the limiting concentration reduction factor and the extent of the waste plume. Petition reissuances and modifications should be made pursuant to 40 CFR §148.20 (e) or (f).

8. Veolia shall annually submit to EPA the results of a bottomhole pressure survey for WDW-160 and WDW-358. These surveys shall be performed after shutting in each well for a period sufficient to allow the pressure in the injection interval to reach equilibrium, in accordance with 40 CFR §146.68(e)(1). The annual report should include a comparison of reservoir parameters determined from the falloff test with parameters used in the approved no migration petition. This should include a comparison of the current year's test results for the static and flowing bottomhole pressures with the values demonstrated in the approved petition reissuance and a comparison of the test results for transmissibility [Kh/μ (mD-ft/cP)] with the transmissibilities used in the approved petition reissuance demonstration for the pressure buildup and 10,000 year plume modeling.

9. Veolia shall also annually submit to EPA a radioactive tracer survey and annulus pressure test for WDW-160 and WDW-358.

10. Veolia shall notify EPA if WDW-160 or WDW-358 loses mechanical integrity, prior to any well work on WDW-160 or WDW-358, or if Veolia plans to plug WDW-160 or WDW-358. If any well work or plugging is being planned, Veolia shall also submit the procedures to EPA for review prior to commencing any work.

11. Upon the expiration, cancellation, reissuance, or modifications of the Texas Commission on Environmental Quality Underground Injection Control permit for WDW-160 or WDW-358, this exemption is subject to review. A new demonstration may be required if information shows that the basis for granting the exemption is no longer valid under 40 CFR §148.23 and §148.24.

In addition to the above conditions, this final approval of a petition for reissuance of an exemption is contingent on the validity of the information submitted in the Veolia petition reissuance request for an exemption to the land disposal restrictions. This final reissuance decision is subject to termination when any of the conditions occur which are listed in 40 CFR §148.24, including noncompliance, misrepresentation of relevant facts, or a determination that new information shows that the basis for approval is no longer valid.

If you have any questions or comments, please call Brian Graves at (214) 665-7193 or email him at graves.brian@epa.gov.

Sincerely,

Charles W. Maguire
Director
Water Division

ecc: Mr. Dan Duncan, Veolia
Mr. Don Icard, Veolia
Ms. Lorrie Council, TCEQ
Mr. Rich Heitzenrater, TCEQ